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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,140	03/29/2004	Maurizio Passarotto	CAM3-PT103	2155

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VOLPE AND KOENIG, P.C.
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EXAMINER

BELLINGER, JASON R

ART UNIT	PAPER NUMBER
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3617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/812,140

Applicant(s)

PASSAROTTO, MAURIZIO

Examiner

Jason R. Bellinger

Art Unit

3617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-50 and 53 is/are pending in the application.
- 4a) Of the above claim(s) 7, 11-15, 26, 27, 32, 33, 35, 37, 38 and 44-48 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6, 8-10, 16-25, 28-31, 36 is/are allowed.
- 6) ☒ Claim(s) 39-43, 49, 50 and 53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Claim Objections

1. Claim 39 is objected to because of the following informalities: The claim contains reference characters not in parentheses (see below).

Namely, the phrase " α and β " should be placed in parentheses.

Furthermore, the phrase "off set" should be replaced with the term --offset-- in line 12 of the claim, for grammatical clarity. Appropriate correction is required.

2. The claims are objected to because they include reference characters which are not enclosed within parentheses.

Reference characters corresponding to elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same element or group of elements in the claims should be enclosed within parentheses so as to avoid confusion with other numbers or characters which may appear in the claims. See MPEP § 608.01(m).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 39-43 and 49-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolff in view of Krampera ('853). Wolff shows a bicycle wheel

including a hub **B** having an axis and a median plane, which is generally perpendicular to the axis. A rim **A** is connected to the hub **B** by a plurality of spokes **C**, which are arranged in spoke sets. A first set of spokes **C** connects a first portion 15 of the hub **B** to the rim **A** on a first side of the median plane, while a second set of spokes **C** connects a second portion 15 of the hub **B** to the rim **A** on a second side of the median plane. The spokes **C** on each side of the median plane produce generally equal forces in opposite directions along the axis to maintain the rim **A** centrally about the median plane (see lines 22-25).

The first and second sets of spokes **C** are arranged so that no spoke of the other set is interposed, in this case meaning that the mounting points of the spokes from each set do not intersect each other, nor do any spokes from different sets share the same mounting points. The spokes **C** of each set, when viewed in the direction of the axis, have a specular (i.e. mirror image) arrangement with respect to a radial plane of symmetry. Each set of spokes **C** includes a spoke that is set at a center point between the two spoke sets in the radial plane of symmetry, when viewed in the direction of the axis. The spokes **C** of the second side of the median plane extend radially from the hub **B** to the rim **A**, when viewed in the direction of the axis.

Wolff does not show the first and second sets of spokes offset from the median plane by unequal angles. Wolff also does not show the wheel being a rear wheel with one portion having twice as many spokes as the other hub portion. In Figure 3, Krampera teaches the use of a rear bicycle wheel. While not specified, it is obvious that the spokes of a first set 7' are offset from the median plane (M) by a different (unequal)

angle than the spokes of a second set 5'. In Figure 4, Krampera teaches the use of a wheel having twice as many spokes on one side of the hub than on the other side of the hub (namely on the side of the hub where the sprocket cassette is mounted).

Therefore from these teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to form the wheel of Wolff as a rear bicycle wheel, for the purpose of providing a propulsion means for the bicycle. It further would have been obvious to one of ordinary skill in the art at the time of the invention to provide twice as many spokes on the sprocket cassette side of the rear wheel for the purpose of balancing the forces created by the increased weight of one side of the hub due to the sprocket cassette in order to prevent the wheel from failing during use. Offsetting the first and second spokes sets with different angles with respect to the median plane would have been obvious to one of ordinary skill in the art at the time of the invention in order to further balance the force loads on the wheel.

5. Claim 53 is rejected under 35 U.S.C. 103(a) as being obvious over Wolff in view of Krampera ('853) as applied to claims 39-43 and 49-50 above, and in further view of Passarotto ('734).

The applied Passarotto reference has a common inventor and assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is

thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2).

Wolff as modified by Krampera does not show that the spokes of the first set (connecting the first hub portion to the rim) and the spokes of the second set (connecting the second hub portion to the rim) are alternately arranged on the first and second hub portions as spoke pairs and single spokes.

Passarotto teaches the use of a bicycle wheel having spokes (20, 22) arranged on left and right hub flanges that alternate between spoke pairs 22 and a single spoke 20 (see the last 6 lines of the Abstract). Therefore from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to alternate the spokes of Wolff as modified by Krampera in the manner taught by Passarotto, for the purpose of distributing the tension forces evenly around the circumference of the hub in addition to opposing sides of the hub.

Allowable Subject Matter

6. Claims 1-6, 8-10, 16-25, 28-31, and 36 are allowable over the prior art.

Response to Arguments

7. Applicant's arguments filed 23 January 2007 have been fully considered but they are not persuasive. The Applicant is correct that the amendments to claim 39 overcome the Wolff reference. The Applicant then asserts that the "proposed combination of Wolff with Krampera and Passarotto" is moot, since the combination does not show or suggest the claimed invention. However, as set forth in the rejection above, the combination *does* show and/or suggest the invention as currently claimed.

While the Examiner agreed that the Wolff reference was possibly overcome by the amendments to claim 39 during the telephonic interview, the Examiner also stated that the amendment would require further search and/or consideration.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason R. Bellinger whose telephone number is 571-272-6680. The examiner can normally be reached on Mon - Thurs (9:00-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Morano can be reached on 571-272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jason R Bellinger
Primary Examiner
Art Unit 3617

